Treasury Presentation to TBAC

Office of Debt Management



Fiscal Year 2020 Q1 Report

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Section I: Executive Summary

Highlights of Treasury's February 2020 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

Receipts and Outlays

- In Q1 FY2020, overall net receipts were up \$48 billion (6%) on a calendar-adjusted basis compared to the same period last year. Increases in withheld income and FICA taxes of \$38 billion (6%), gross corporate taxes of \$13 billion (20%), and customs duties of \$4 billion (22%) were partially offset by declines in excise taxes of \$11 billion (-35%) reflecting the fact that Health Insurance Provider fees paid in October 2018 were on moratorium in calendar year 2019. Q1 FY2020 receipts were 14.8% of GDP, which is unchanged from the same period last year.
- After calendar adjustments, in Q1 FY2020 outlays were \$72 billion (7%) higher than the comparable period last year. Health and Human Services spending was \$20 billion (7%) higher due to increased Medicare and Medicaid expenditures. Social Security Administration outlays were \$15 billion (6%) higher due to increases in enrollment and in the average benefit. Department of Defense expenditures were up \$15 billion (9%). Outlays were also up \$8 billion (4%) for Department of Treasury, \$3 billion (5%) for Veterans Affairs and \$2 billion (4%) for Agriculture. Q1 FY2020 outlays were 21.4% of GDP, compared to 20.9% of GDP for the same period last year.

Projected Net Marketable Borrowing (FY2020)

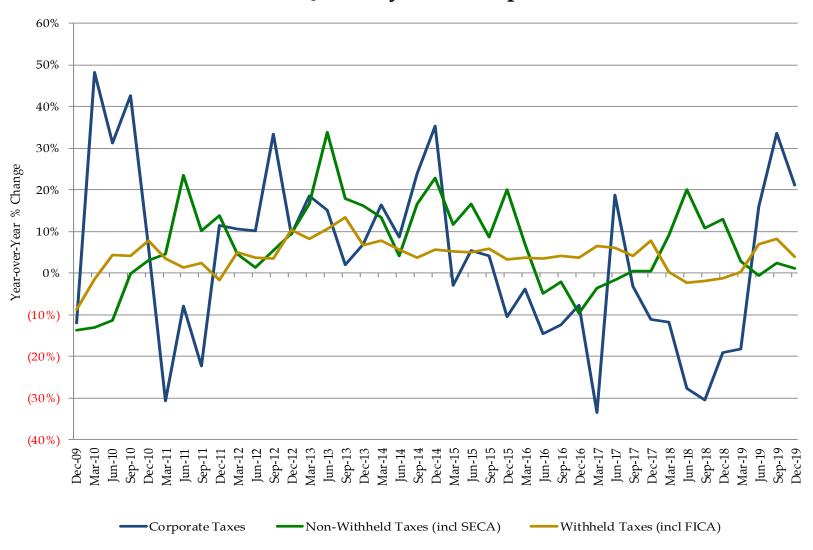
• Treasury's Office of Fiscal Projections (OFP) currently forecasts a net privately-held marketable borrowing need of \$367 billion for Q2 FY2020, with an end-of-March cash balance of \$400 billion. For Q3 FY2020, OFP forecasts a net privately-held marketable borrowing need of \$-56 billion assuming end-of-June cash balance of \$400 billion. Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

Demand for Treasury Securities

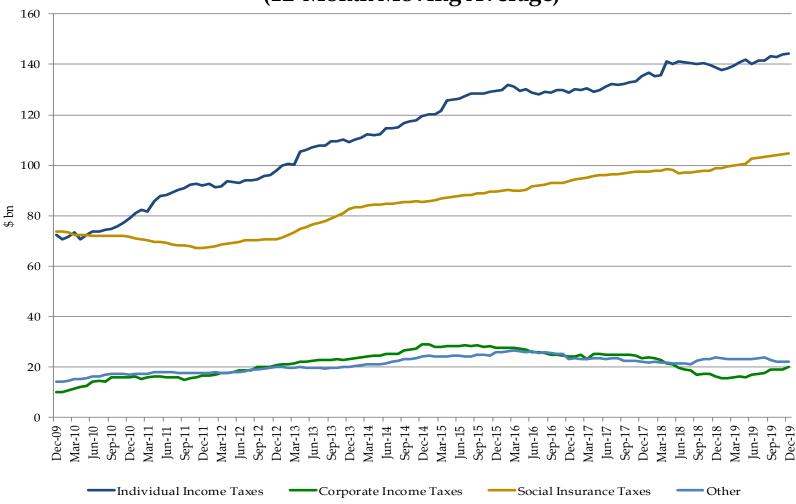
- Bid-to-cover ratios for all securities were largely stable over the last quarter.
- · Foreign demand remained steady.

Section II: Fiscal

Quarterly Tax Receipts



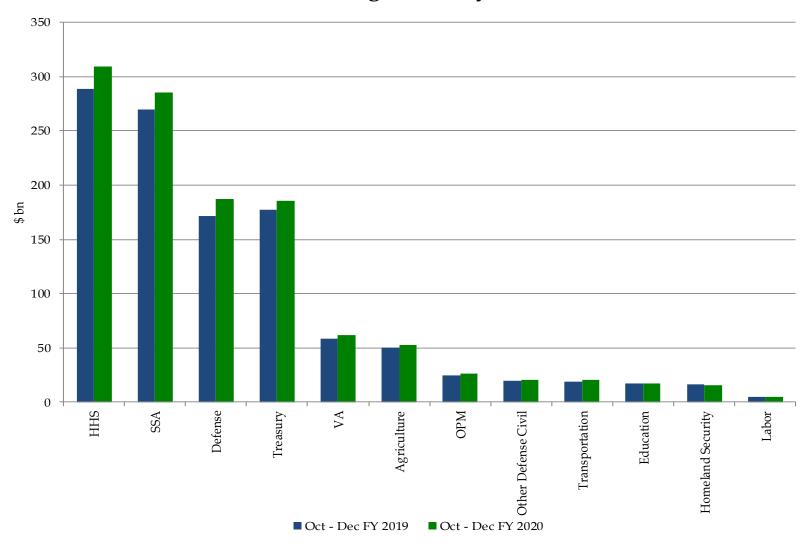
Monthly Receipt Levels (12-Month Moving Average)



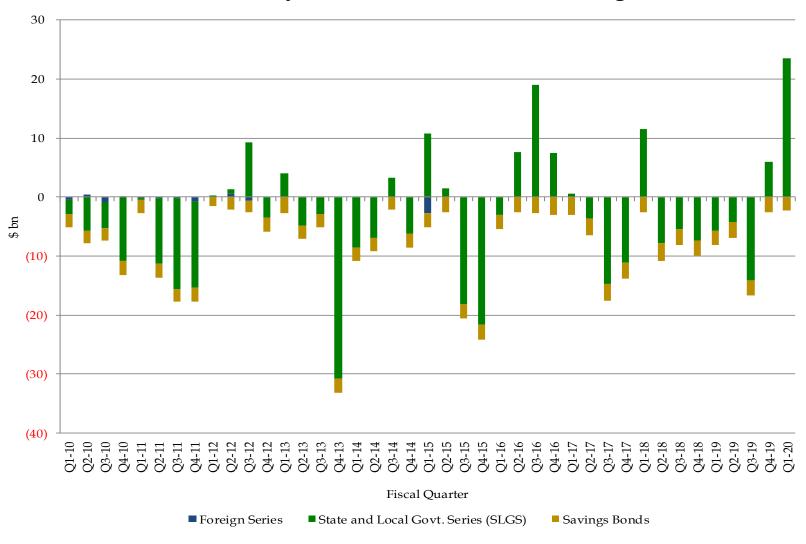
Individual Income Taxes include withheld and non-withheld. Social Insurance Taxes include FICA, SECA, RRTA, UTF deposits, FUTA and RUIA. Other includes excise taxes, estate and gift taxes, customs duties and miscellaneous receipts.

Source: United States Department of the Treasury

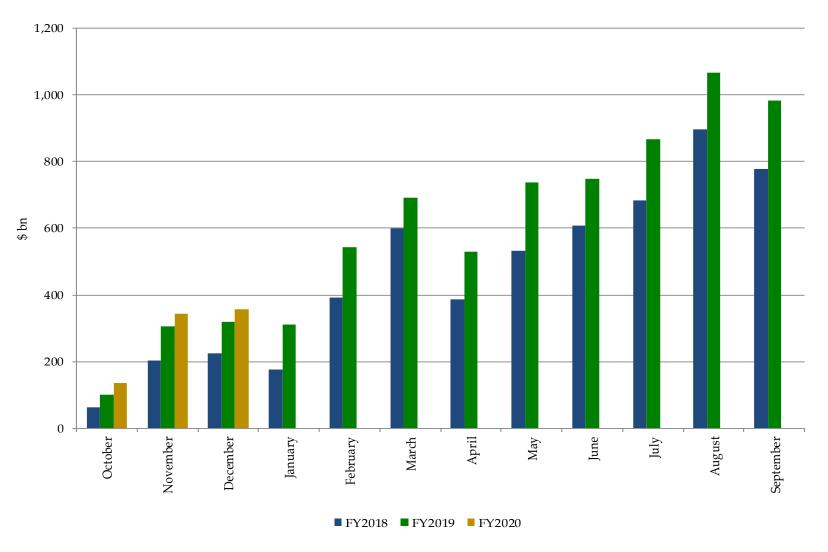
Largest Outlays



Treasury Net Nonmarketable Borrowing



Cumulative Budget Deficits by Fiscal Year



FY 2020-2022 Deficits and Privately-Held Net Marketable Borrowing Estimates*, in \$ billions

	Primary Dealers ¹	CBO ²	OMB^3	CBO ⁴
FY2020 Deficit Estimate	1,050	1,015	1,045	966
FY2021 Deficit Estimate	1,100	1,000	1,015	921
FY2022 Deficit Estimate	1,161	1,116	967	1,073
FY2020 Deficit Estimate Range	1,000-1,170			
FY2021 Deficit Estimate Range	1,030-1,250			
FY2022 Deficit Estimate Range	1,025-1,275			
FY2020 Privately-Held Net Marketable Borrowing Estimate	1,059	1,052	1,112	1,030
FY2021 Privately-Held Net Marketable Borrowing Estimate	1,100	1,031	1,082	978
FY2022 Privately-Held Net Marketable Borrowing Estimate	1,188	1,180	1,030	1,121
FY2020 Privately-Held Net Marketable Borrowing Range	490-1,350			
FY2021 Privately-Held Net Marketable Borrowing Range	800-1,322			
FY2022 Privately-Held Net Marketable Borrowing Range	850-1,330			
Estimates as of:	Jan-20	Jan-20	Jul-19	May-19

¹Estimates represent the medians from the primary dealer survey in January 2020.

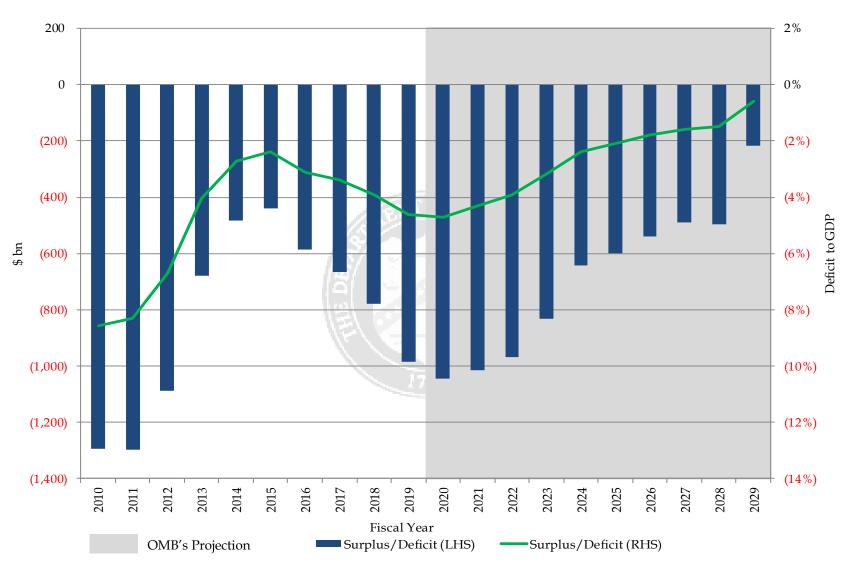
²Table 1-1 of CBO's "The Budget And Economic Outlook: 2020 to 2030," January 2020 (current law).

³Table S-11 of OMB's "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019.

⁴Table 2 of CBO's "An Analysis of the President's 2020 Budget," May 2019.

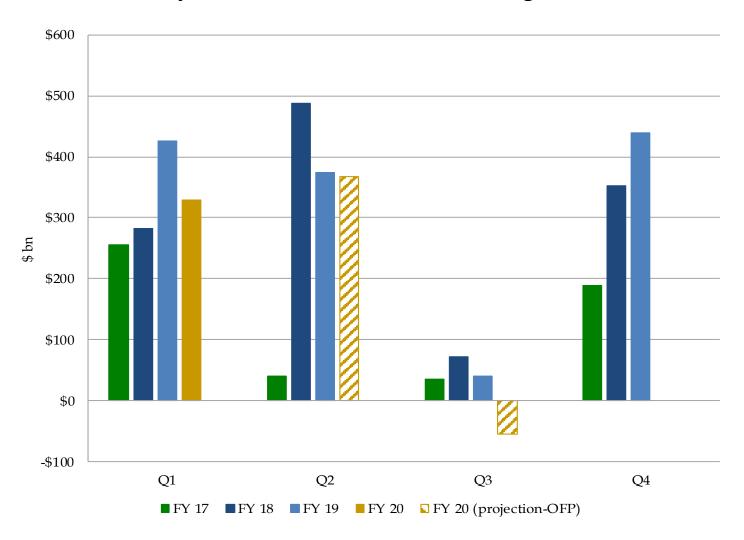
^{*}Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

Budget Surplus/Deficit



Projections are from Table S-11 of OMB's "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019.

Privately-Held Net Marketable Borrowing Outlook*



^{*} Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

Section III: Financing

Assumptions for Financing Section (pages 16 to 21)

- Portfolio and SOMA holdings as of 12/31/2019.
- Estimates assume private announced issuance sizes and patterns remain constant for nominal coupons, TIPS, and FRNs given changes made at the November 2019 refunding, while using total bills outstanding of ~\$2.42 trillion.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 12/31/2019.
- No attempt was made to account for future financing needs.



Sources of Privately-Held Financing in FY20 Q1*

October - December 2019	
Net Bill Issuance	40
Net Coupon Issuance	290
Subtotal: Net Marketable Borrowing	330
Ending Cash Balance	404
Beginning Cash Balance	382
Subtotal: Change in Cash Balance	21
Net Implied Funding for FY20 Q1**	309
- '	

	Octob	oer - December Bill Issuance	: 2019	Fiscal Year-to-Date Bill Issuance			
Security	Gross	Maturing	Net	Gross	Maturing	Net	
4-Week	660	714	(54)	660	714	(54)	
8-Week	535	539	(4)	535	539	(4)	
13-Week	573	529	44	573	529	44	
26-Week	519	469	50	519	469	50	
52-Week	82	78	4	82	78	4	
CMBs	15	15	0	15	15	0	
Bill Subtotal	2,384	2,344	40	2,384	2,344	40	

	Octob	er - December	2019	Fi	scal Year-to-Da	te
	C	oupon Issuanc	:e	C	oupon Issuanc	e
Security	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	56	41	15	56	41	15
2-Year	120	50	70	120	50	70
3-Year	114	72	42	114	72	42
5-Year	123	131	(8)	123	131	(8)
7-Year	96	58	38	96	58	38
10-Year	75	37	38	75	37	38
30-Year	51	0	51	51	0	51
5-Year TIPS	32	0	32	32	0	32
10-Year TIPS	12	0	12	12	0	12
30-Year TIPS	0	0	0	0	0	0
Coupon Subtotal	679	389	290	679	389	290

330

3,063

2,733

330

*Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open
Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by

3,063

2,733

Total

SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

^{**}An end-of-December 2019 cash balance of \$404 billion versus a beginning-of-October 2019 cash balance of \$382 billion. By keeping the cash balance constant, Treasury arrives at the net implied funding number.

Sources of Privately-Held Financing in FY20 Q2*

January - March 2020	
Assuming Constant Coupon Issuance Sizes**	
Treasury Announced Net Marketable Borrowing***	367
Net Coupon Issuance	236
Implied Change in Bills	131

	Jan	uary - March 20	020	Fiscal Year-to-Date			
	(Coupon Issuanc	e	C	Coupon Issuance		
Security	Gross	Maturing^	Net	Gross	Maturing	Net	
2-Year FRN	56	45	11	112	86	26	
2-Year	120	83	37	240	134	106	
3-Year	114	72	42	228	144	84	
5-Year	123	105	18	246	235	11	
7-Year	96	60	36	192	118	74	
10-Year	75	44	31	150	80	70	
30-Year	51	3	48	102	3	99	
5-Year TIPS	0	0	0	32	0	32	
10-Year TIPS	26	21	5	38	21	17	
30-Year TIPS	8	0	8	8	0	8	
Coupon Subtotal	669	433	236	1,348	822	526	

^{*} Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

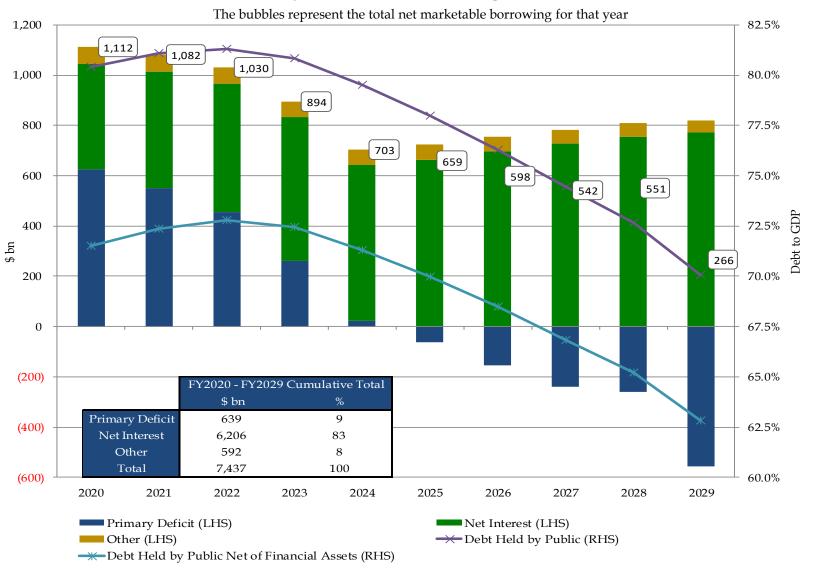
^{**} Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs based on changes made at the November 2019 refunding.

^{***} Assumes an end-of-March 2020 cash balance of \$400 billion versus a beginning-of-January 2020 cash balance of \$404 billion.

Financing Estimates released by the Treasury can be found here: http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Pages/Latest.aspx

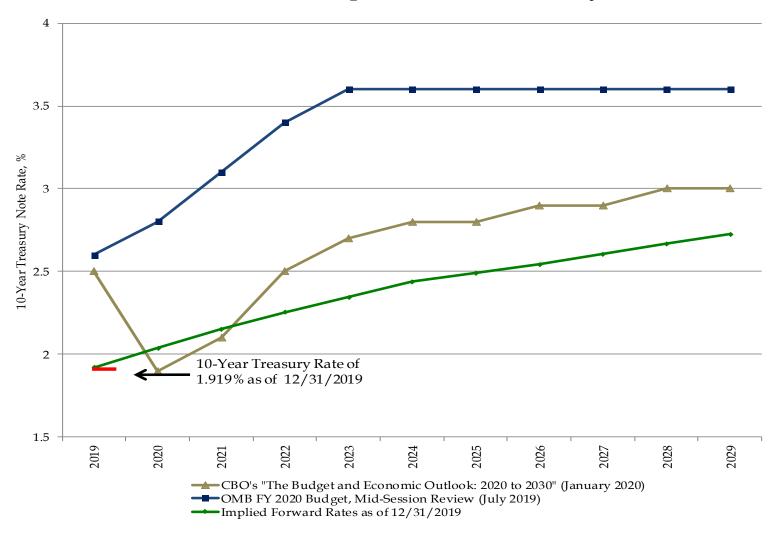
[^] Maturing amounts could change based on future Federal Reserve purchases.

OMB's Projection of Borrowing from the Public



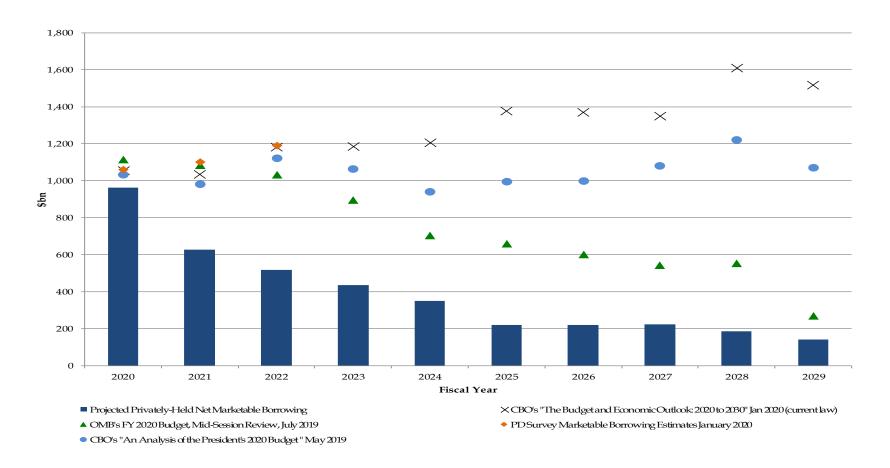
OMB's projections of the change in debt held by the public (borrowing) are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020 Mid-Session Review," July 2019. "Other" represents borrowing from the public to provide direct and guaranteed loans.

Interest Rate Assumptions: 10-Year Treasury Note



OMB's economic assumption of the 10-Year Treasury note rates reflect the calendar year average from Table 3 of OMB's "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019. CBO's economic assumption 10-Year Treasury note rates reflect the fiscal year average from Table B-2 of CBO's "The Budget and Economic Outlook: 2020 to 2030," January 2020. The forward rates are the implied 10-Year Treasury note rates on December 31, 2019.

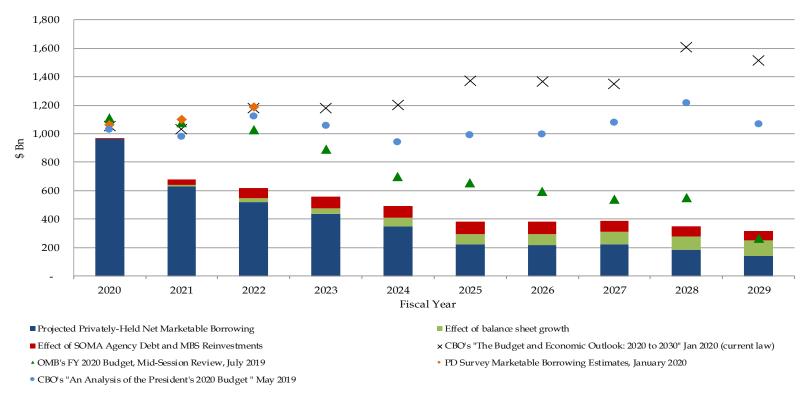
Projected Privately-Held Net Marketable Borrowing Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant*



Treasury's latest primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019. CBO's current law budget projections of the change in debt held by the public are from 1-1 of CBO's "The Budget and Economic Outlook: 2020 to 2030," January 2020. CBO's budget projections of the change in debt held by the public are from Table 2 of "An Analysis of the President's 2020 Budget," May 2019. See table in the appendix section for details.

^{*} Privately-held net marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. No adjustments are made for open-market outright purchases.

Estimate of the Effect of SOMA Purchases* on Projected Privately-Held Net Marketable Borrowing** Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant



Treasury's latest primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019. CBO's current law budget projections of the change in debt held by the public are from Table 1-1 of CBO's "The Budget and Economic Outlook: 2020 to 2030," January 2020. CBO's budget projections of the change in debt held by the public are from Table 2 of "An Analysis of the President's 2020 Budget," May 2019.

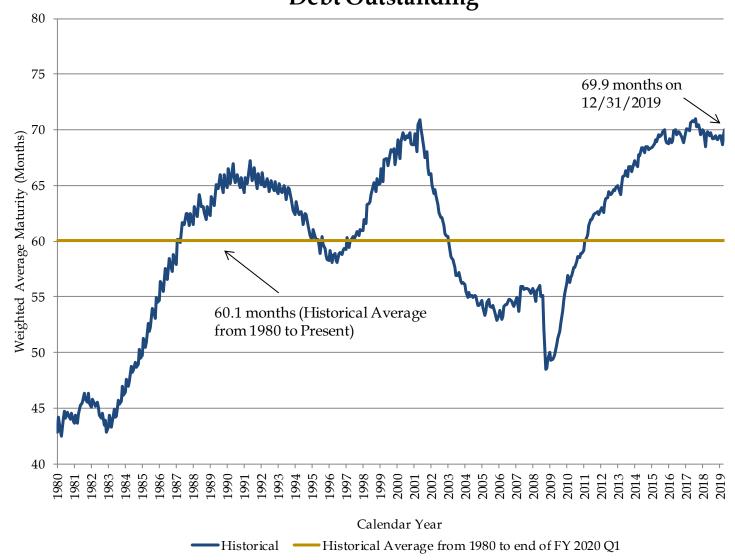
* The principal payments from agency debt and agency MBS up to a maximum amount of \$20 billion per month will be reinvested in Treasury securities through secondary market purchases that roughly match the maturity composition of Treasury securities outstanding [1]. The currency portion of the Fed's balance sheet is assumed to grow at the historical annual rate and assumed to be offset by Treasury securities purchases in the same manner consistent with the MBS principal payments. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

** Privately-held net marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open Market Account (SOMA) but includes financing required due to SOMA redemptions.

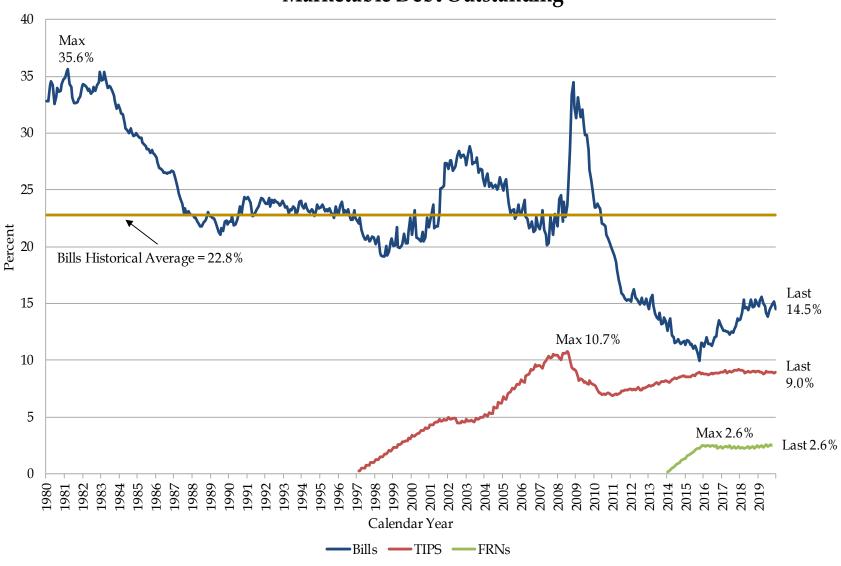
[1] https://www.newyorkfed.org/markets/opolicy/operating_policy_190731

Section IV: Portfolio Metrics

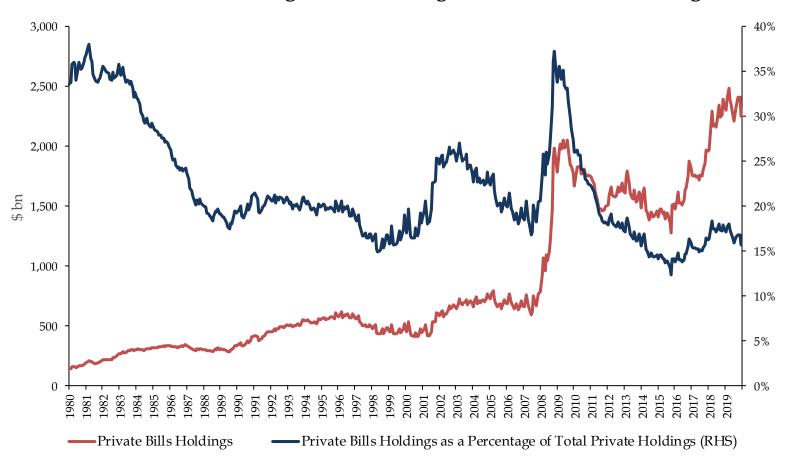
Historical Weighted Average Maturity of Marketable Debt Outstanding



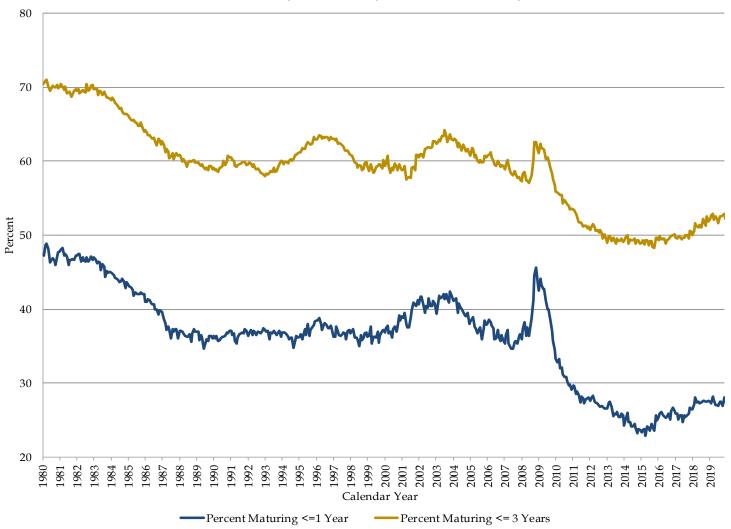
Bills, TIPS & FRNs Outstanding as a Percent of Marketable Debt Outstanding



Private Bills Holdings as a Percentage of Total Private Holdings



Treasury Maturity Profile History



Section V: Demand

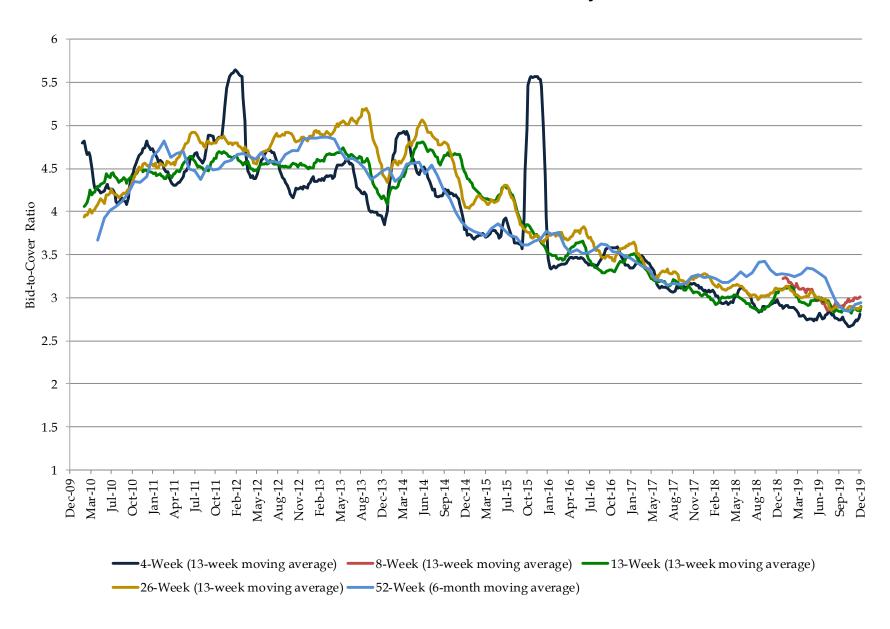
Summary Statistics for Fiscal Year 2020 Q1 Auctions

Security Type	Term	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add- Ons" (\$bn)	10-Year Equivalent (\$bn)**
Bill	4-Week	1.609	2.8	591.4	51.5	4.0	44.5	23.6	9.4	5.3
Bill	8-Week	1.590	3.0	488.7	48.2	2.7	49.1	6.3	8.7	8.5
Bill	13-Week	1.574	2.9	553.0	45.9	3.5	50.6	17.0	1.9	15.6
Bill	26-Week	1.578	2.9	498.4	53.1	2.9	43.9	14.6	1.7	28.2
Bill	52-Week	1.561	3.0	106.4	56.1	3.8	40.1	1.6	0.0	11.8
Bill	CMB	1.540	3.6	15.0	79.7	3.0	17.3	0.0	0.0	0.1
Coupon	2-Year	1.616	2.5	119.4	28.9	21.5	49.6	0.6	11.1	28.4
Coupon	3-Year	1.558	2.5	113.7	31.4	19.2	49.4	0.3	18.0	42.7
Coupon	5-Year	1.638	2.5	122.9	22.0	13.7	64.3	0.1	11.4	71.1
Coupon	7-Year	1.737	2.5	96.0	19.2	16.0	64.8	0.0	8.9	76.3
Coupon	10-Year	1.749	2.5	75.0	25.3	14.7	59.9	0.0	12.8	88.5
Coupon	30-Year	2.310	2.3	51.0	19.8	20.1	60.2	0.0	9.0	142.8
TIPS	5-Year	0.038	2.7	31.9	13.5	24.6	61.9	0.1	3.2	19.0
TIPS	10-Year	0.149	2.4	12.0	15.4	25.8	58.8	0.0	0.0	12.5
FRN	2-Year	0.268	3.1	56.0	58.7	0.9	40.4	0.0	2.1	0.0
	Total Bills	1.587	2.9	2,253.0	50.2	3.3	46.5	63.0	21.7	69.5
	Total Coupons	1.708	2.5	577.9	25.0	17.5	57.5	1.1	71.2	449.9
	Total TIPS	0.068	2.6	43.9	14.0	24.9	61.1	0.1	3.2	31.5
	Total FRN	0.268	3.1	56.0	58.7	0.9	40.4	0.0	2.1	0.0

^{*}Weighted averages of Competitive Awards. FRNs are reported on discount margin basis.

^{**}Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS 10-year equivalent, a constant auction BEI is used as the inflation assumption.

Bid-to-Cover Ratios for Treasury Bills



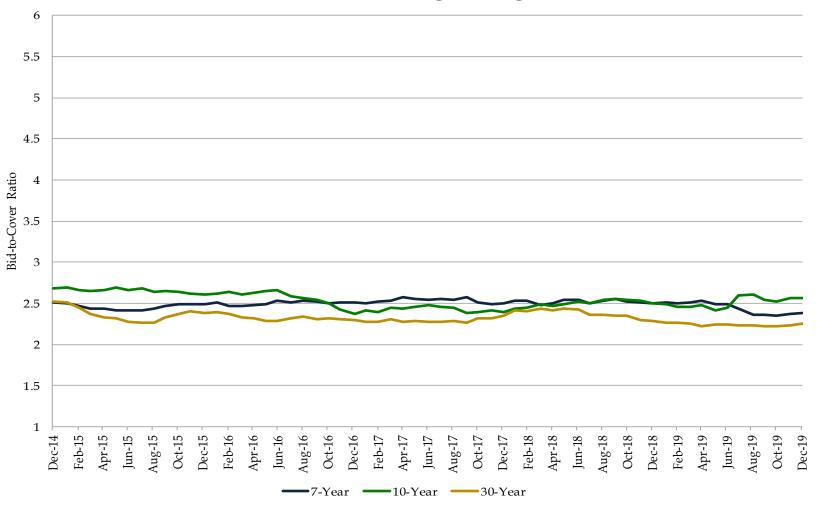
Bid-to-Cover Ratios for FRNs (6-Month Moving Average)



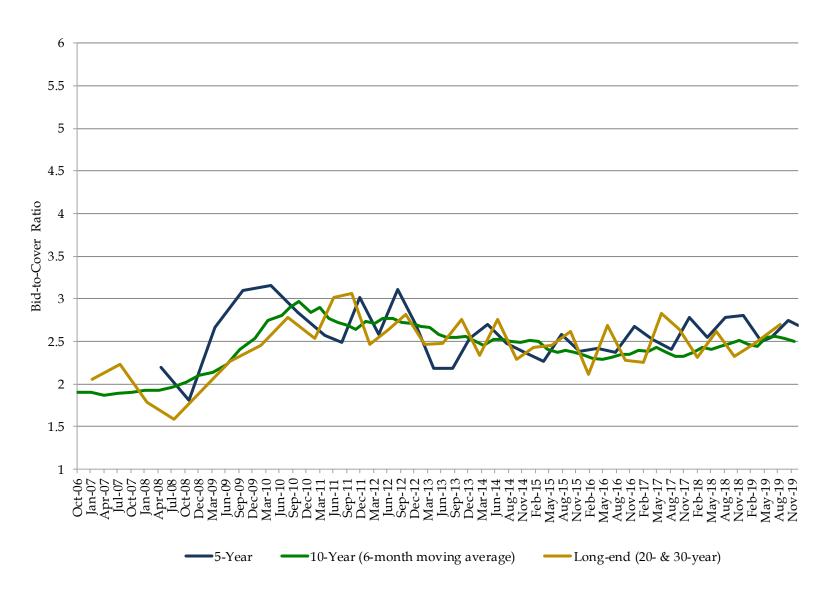
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)



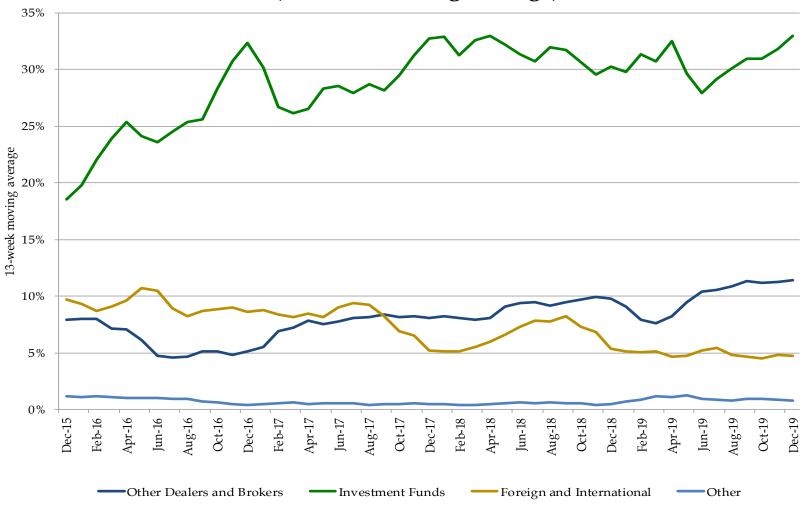
Bid-to-Cover Ratios for 7-, 10-, and 30-Year Nominal Securities (6-Month Moving Average)



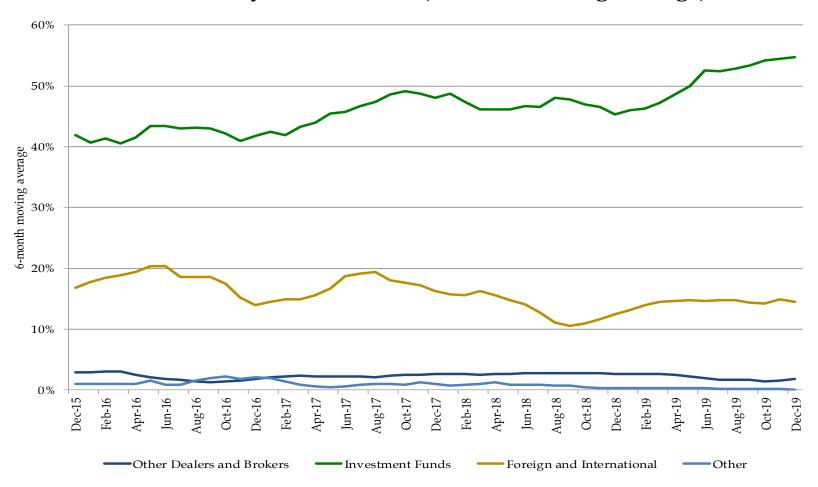
Bid-to-Cover Ratios for TIPS



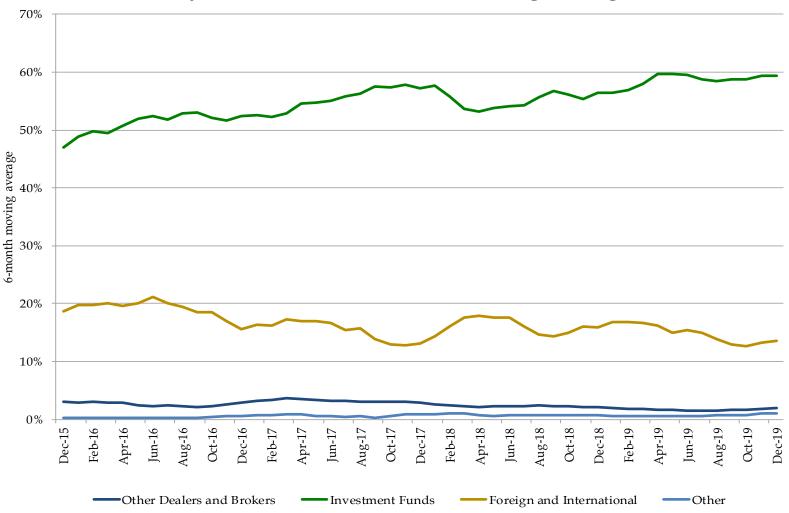
Percent Awarded in Bill Auctions by Investor Class (13-Week Moving Average)



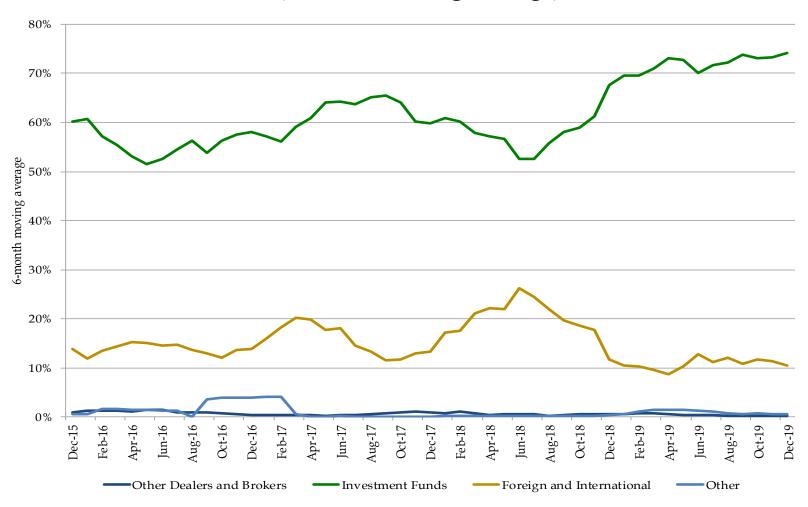
Percent Awarded in 2-, 3-, and 5-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



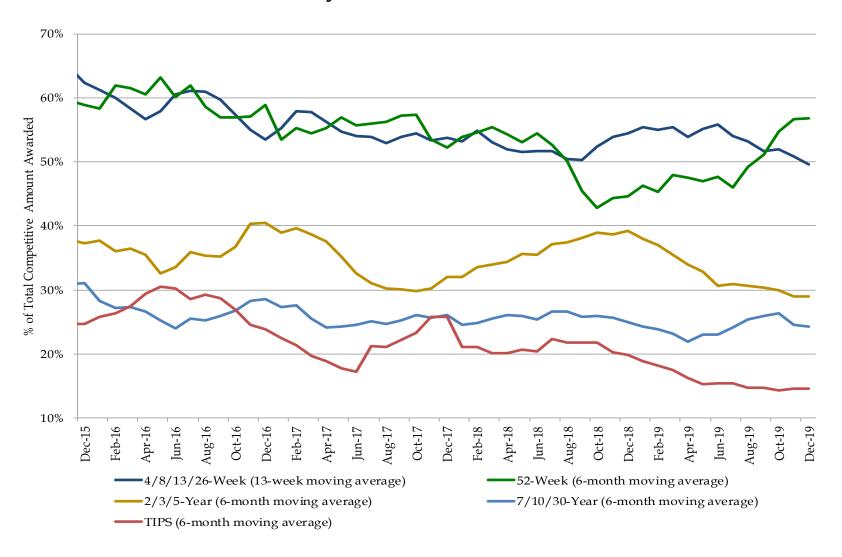
Percent Awarded in 7-, 10-, 30-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



Percent Awarded in TIPS Auctions by Investor Class (6-Month Moving Average)

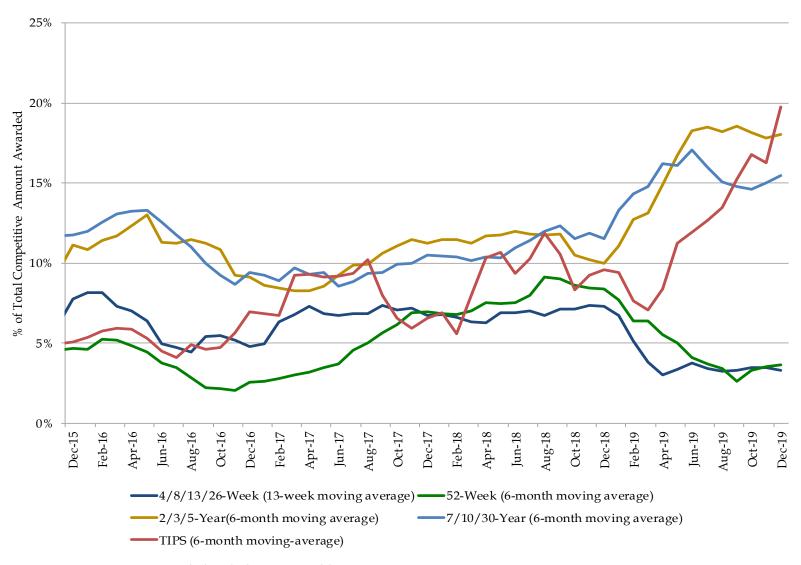


Primary Dealer Awards at Auction



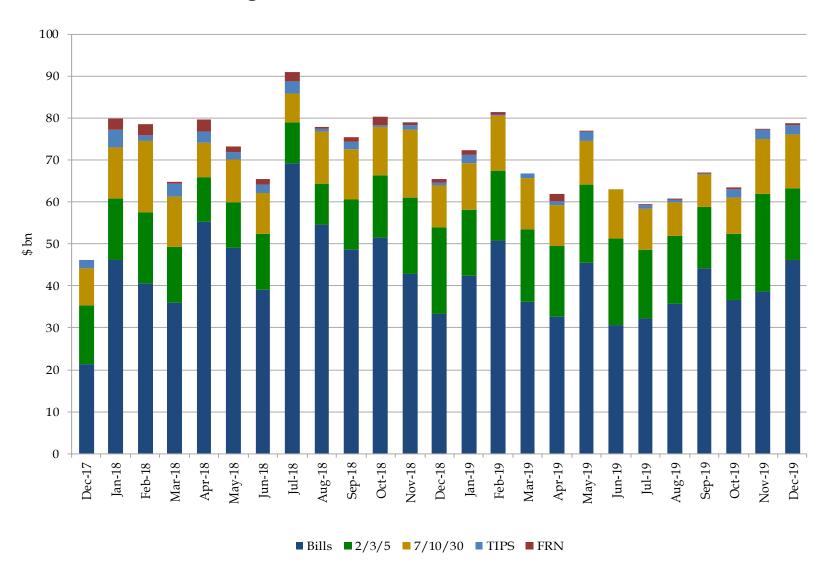
Competitive Amount Awarded excludes SOMA add-ons.

Direct Bidder Awards at Auction



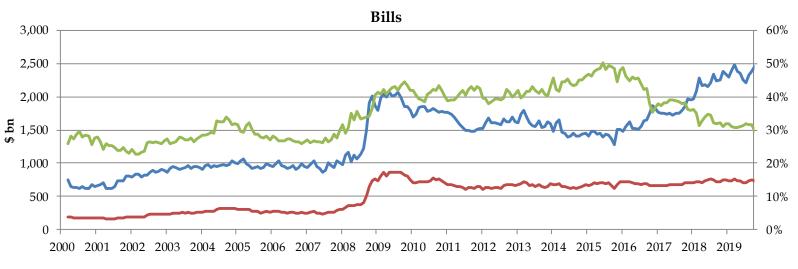
Competitive Amount Awarded excludes SOMA add-ons.

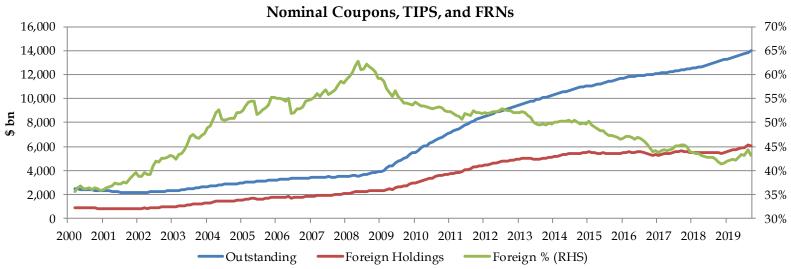
Total Foreign Awards of Treasuries at Auction, \$ billions



Foreign includes both private sector and official institutions.

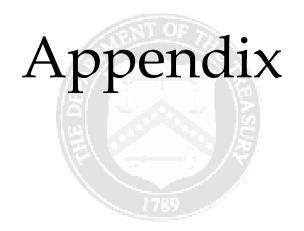
Total Foreign Holdings





Source: Treasury International Capital (TIC) System.

For more information on foreign participation data, including more details about the TIC data shown here, please refer to Treasury Presentation to TBAC "Brief Overview of Key Data Sources on Foreign Participation in the U.S. Treasury Securities Market" at the Treasury February 2019 Refunding.



Projected Privately-Held Net Marketable Borrowing Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant

Fiscal Year	Bills	2/3/5	7/10/30	TIPS	FRN	Historical/Projected Net Borrowing Capacity	OMB's FY 2020 Mid- Session Review	CBO's "The Budget and Economic Outlook: 2020 to 2030"	Primary Dealer Survey
2015	(53)	(282)	642	88	164	558			
2016	289	(107)	515	58	41	795			
2017	155	(66)	378	51	(0)	519			
2018	438	197	493	45	23	1,196			
2019	137	498	534	51	59	1,280			
2020	40	359	482	46	37	963	1,112	1,052	1,059
2021	0	284	315	27	2	628	1,082	1,031	1,100
2022	0	94	409	14	1	519	1,030	1,180	1,188
2023	0	176	248	11	0	436	894	1,182	
2024	0	89	238	24	0	351	703	1,205	
2025	0	(0)	264	(43)	0	221	659	1,374	
2026	0	0	242	(24)	0	218	598	1,369	
2027	0	0	242	(19)	0	223	542	1,349	
2028	0	0	221	(37)	0	184	551	1,607	
2029	0	0	187	(44)	0	142	266	1,515	

Projections reflect only SOMA rollovers at auction of principal payments of Treasury securities. No adjustments are made for open-market outright purchases and subsequent rollovers.

Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open Market Account (SOMA) but includes financing required due to SOMA redemptions.

Treasury's latest primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "A Budget for a Better America, Fiscal Year 2020, Mid-Session Review," July 2019. CBO's baseline budget projections of the change in debt held by the public are from Table 1-1 of CBO's "The Budget and Economic Outlook: 2020 to 2030," January 2020.

					Bills					
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
4-Week	10/8/2019	1.750	2.90	42.4	56.5	2.7	40.8	2.6	0.1	0.4
4-Week	10/15/2019	1.720	2.62	48.4	58.3	2.5	39.3	1.6	0.0	0.4
4-Week	10/22/2019	1.720	2.50	53.5	58.2	3.0	38.8	1.5	0.0	0.5
4-Week	10/29/2019	1.710	2.75	53.3	46.6	6.8	46.6	1.7	0.0	0.5
4-Week	11/5/2019	1.570	2.83	53.3	56.4	2.4	41.2	1.7	0.0	0.5
4-Week	11/12/2019	1.535	2.65	53.3	50.9	3.7	45.5	1.7	0.0	0.5
4-Week	11/19/2019	1.565	2.52	53.3	66.6	5.5	27.9	1.7	0.0	0.5
4-Week	11/26/2019	1.550	2.82	48.5	47.0	3.0	50.0	1.5	0.0	0.4
4-Week	12/3/2019	1.620	2.73	43.4	51.6	4.4	44.0	1.6	0.6	0.4
4-Week	12/10/2019	1.500	3.16	38.3	42.7	0.9	56.4	1.7	0.1	0.3
4-Week	12/17/2019	1.540	2.59	38.5	42.0	11.5	46.6	1.5	4.3	0.4
4-Week	12/24/2019	1.510	3.19	32.5	36.1	3.1	60.7	2.5	2.0	0.3
4-Week	12/31/2019	1.555	3.31	32.6	44.4	1.7	53.9	2.4	2.3	0.3
8-Week	10/8/2019	1.710	2.86	38.8	60.0	3.4	36.6	1.2	0.0	0.7
8-Week	10/15/2019	1.685	2.88	39.7	54.7	2.7	42.5	0.3	0.0	0.7
8-Week	10/22/2019	1.665	2.99	39.8	48.6	2.7	48.7	0.2	0.0	0.7
8-Week	10/29/2019	1.680	2.85	39.8	54.1	3.6	42.3	0.2	0.0	0.7
8-Week	11/5/2019	1.560	3.21	39.8	40.2	1.5	58.3	0.2	0.0	0.7
8-Week	11/12/2019	1.530	2.81	39.6	54.1	2.8	43.2	0.4	0.0	0.7
8-Week	11/19/2019	1.520	3.20	39.6	38.6	1.7	59.7	0.4	0.0	0.7
8-Week	11/26/2019	1.540	2.89	39.8	48.8	3.0	48.2	0.2	0.0	0.7
8-Week	12/3/2019	1.570	3.53	34.8	46.7	1.9	51.4	0.2	0.5	0.6
8-Week	12/10/2019	1.520	3.18	34.7	44.1	2.8	53.1	0.3	0.1	0.6
8-Week	12/17/2019	1.540	2.69	34.7	43.4	2.6	53.9	0.3	3.8	0.7
8-Week	12/24/2019	1.555	2.78	33.7	49.7	4.3	46.0	1.3	2.0	0.6
8-Week	12/31/2019	1.565	3.24	33.8	42.1	1.6	56.3	1.2	2.3	0.6

^{*}Weighted averages of competitive awards.

**Approximated using prices at settlement and includes both competitive and non-competitive awards.

					Bills					
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
13-Week	10/10/2019	1.680	3.16	43.9	37.5	2.3	60.2	1.1	0.0	1.2
13-Week	10/17/2019	1.640	2.58	43.9	58.8	5.3	35.9	1.1	0.0	1.2
13-Week	10/24/2019	1.630	3.01	44.0	31.6	3.4	65.0	1.0	0.0	1.2
13-Week	10/31/2019	1.620	3.10	43.9	37.8	2.1	60.0	1.1	0.0	1.2
13-Week	11/7/2019	1.520	2.63	43.8	55.3	3.9	40.8	1.2	0.0	1.2
13-Week	11/14/2019	1.565	2.70	43.7	64.8	3.6	31.6	1.3	1.0	1.3
13-Week	11/21/2019	1.540	3.01	43.9	44.4	4.4	51.2	1.1	0.0	1.2
13-Week	11/29/2019	1.560	2.89	43.9	46.9	2.2	50.9	1.1	0.0	1.2
13-Week	12/5/2019	1.560	3.03	41.1	41.5	2.7	55.8	0.9	0.0	1.1
13-Week	12/12/2019	1.520	2.77	40.8	56.7	6.8	36.4	1.2	0.0	1.1
13-Week	12/19/2019	1.540	2.70	40.0	43.3	4.0	52.7	2.0	0.0	1.1
13-Week	12/26/2019	1.555	2.94	40.0	37.9	1.5	60.6	2.0	0.8	1.2
13-Week	1/2/2020	1.520	3.21	40.1	39.7	2.8	57.6	1.9	0.0	1.2
26-Week	10/10/2019	1.690	2.52	41.0	76.2	2.4	21.4	1.0	0.0	2.3
26-Week	10/17/2019	1.620	3.15	40.9	39.6	7.4	53.1	1.1	0.0	2.3
26-Week	10/24/2019	1.600	2.73	41.0	49.3	2.8	47.9	1.0	0.0	2.3
26-Week	10/31/2019	1.610	3.23	41.0	41.5	1.5	57.0	1.0	0.0	2.3
26-Week	11/7/2019	1.535	2.69	41.2	57.5	2.7	39.8	0.8	0.0	2.3
26-Week	11/14/2019	1.550	2.99	40.3	41.8	2.5	55.7	1.7	1.0	2.4
26-Week	11/21/2019	1.540	2.89	41.3	44.9	2.4	52.7	0.7	0.0	2.3
26-Week	11/29/2019	1.580	2.73	38.3	64.4	2.7	32.8	0.7	0.0	2.1
26-Week	12/5/2019	1.565	3.11	35.3	46.3	1.4	52.3	0.7	0.0	2.0
26-Week	12/12/2019	1.520	2.98	35.1	46.8	4.0	49.2	0.9	0.0	2.0
26-Week	12/19/2019	1.550	2.63	34.3	69.0	3.7	27.4	1.7	0.0	2.0
26-Week	12/26/2019	1.570	3.03	34.4	47.9	2.2	49.9	1.6	0.7	2.0
26-Week	1/2/2020	1.560	2.81	34.4	68.3	2.6	29.1	1.6	0.0	2.0
52-Week	10/10/2019	1.600	2.98	27.6	55.7	6.0	38.3	0.4	0.0	3.0
52-Week	11/7/2019	1.565	2.84	27.6	59.7	4.6	35.7	0.4	0.0	3.1
52-Week	12/5/2019	1.525	3.39	25.6	39.2	2.6	58.2	0.4	0.0	2.8
52-Week	1/2/2020	1.550	2.95	25.6	69.5	1.8	28.6	0.4	0.0	2.9
СМВ	11/26/2019	1.540	3.63	15.0	79.7	3.0	17.3	0.0	0.0	0.1

^{*}Weighted averages of competitive awards.
**Approximated using prices at settlement and includes both competitive and non-competitive awards.

Nominal Coupons											
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**	
2-Year	10/31/2019	1.594	2.70	39.9	31.2	14.0	54.8	0.1	4.2	9.6	
2-Year	12/2/2019	1.601	2.63	39.8	23.1	29.1	47.8	0.2	3.2	9.3	
2-Year	12/31/2019	1.653	2.30	39.7	32.2	21.5	46.3	0.3	3.8	9.5	
3-Year	10/15/2019	1.413	2.43	38.0	37.3	16.9	45.8	0.0	0.0	12.3	
3-Year	11/15/2019	1.630	2.60	37.9	29.7	16.9	53.3	0.1	18.0	18.2	
3-Year	12/16/2019	1.632	2.56	37.8	27.1	23.8	49.1	0.2	0.0	12.2	
5-Year	10/31/2019	1.570	2.41	41.0	22.8	11.5	65.7	0.0	4.3	24.1	
5-Year	12/2/2019	1.587	2.50	41.0	21.6	13.5	64.8	0.0	3.3	23.3	
5-Year	12/31/2019	1.756	2.49	41.0	21.5	16.1	62.4	0.0	3.9	23.7	
7-Year	10/31/2019	1.657	2.46	32.0	20.1	14.5	65.4	0.0	3.3	25.9	
7-Year	12/2/2019	1.719	2.44	32.0	20.3	10.1	69.6	0.0	2.5	25.0	
7-Year	12/31/2019	1.835	2.47	32.0	17.1	23.4	59.4	0.0	3.0	25.5	
10-Year	10/15/2019	1.590	2.43	24.0	28.7	12.8	58.5	0.0	0.0	24.0	
10-Year	11/15/2019	1.809	2.49	27.0	23.1	12.4	64.5	0.0	12.8	40.6	
10-Year	12/16/2019	1.842	2.43	24.0	24.5	19.4	56.1	0.0	0.0	24.0	
30-Year	10/15/2019	2.170	2.25	16.0	22.9	18.5	58.5	0.0	0.0	38.3	
30-Year	11/15/2019	2.430	2.23	19.0	20.7	20.5	58.8	0.0	9.0	66.7	
30-Year	12/16/2019	2.307	2.46	16.0	15.5	21.1	63.4	0.0	0.0	37.8	
2-Year FRN	10/31/2019	0.300	2.58	20.0	52.2	1.2	46.6	0.0	2.1	0.0	
2-Year FRN	11/29/2019	0.240	2.50	18.0	78.4	0.7	21.0	0.0	0.0	0.0	
2-Year FRN	12/27/2019	0.260	4.17	18.0	46.3	0.8	52.9	0.0	0.0	0.0	

TIPS											
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**	
5-Year TIPS	10/31/2019	0.054	2.75	17.0	13.8	18.2	67.9	0.0	1.8	10.3	
5-Year TIPS	12/31/2019	0.020	2.69	15.0	13.1	31.8	55.1	0.0	1.4	8.7	
10-Year TIPS	11/29/2019	0.149	2.40	12.0	15.4	25.8	58.8	0.0	0.0	12.5	

^{*}Weighted averages of competitive awards. FRNs are reported on discount margin basis.

^{**}Approximated using prices at settlement and includes both competitive and non-competitive awards. For TIPS 10-Year equivalent, a constant auction BEI is used as the inflation assumption.